



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,648	09/22/2003	Walter H. Christiansen	US.03.036	1123

33249 7590 12/28/2005

RESOLUTION PERFORMANCE PRODUCTS LLC
ATTN: LISA JONES
1600 SMITH STREET, P.O. BOX 4500
HOUSTON, TX 77210-4500

EXAMINER

FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/667,648

Applicant(s)

CHRISTIANSEN ET AL.

Examiner

Michael J. Feely

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The rejection of claims 1-18 under 35 U.S.C. 102(b) as being anticipated by Yasuda et al. (US Pat. No. 5,081,206) has been withdrawn.

3. The rejection of claims 1 and 3-18 under 35 U.S.C. 102(b) as being anticipated by Corley (US Pat. No. 4,503,200) has been overcome by amendment.

4. The rejection of claims 1 and 3-18 under 35 U.S.C. 102(b) as being anticipated by Allen (US Pat. No. 4,554,341) has been overcome by amendment.

5. Claims 1-7 and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al. (US Pat. No. 4,168,364).

Regarding claims 1-7 and 14-18, Seltzer et al. disclose: *(1)* a process for preparing a resin coated article, the process comprising contacting a substrate with an accelerated resin composition (Abstract) comprising an epoxy resin (column 1, line 44 through column 3, line 37), a curing agent (column 3, line 38 through column 4, line 33), and an alkali metal containing cure accelerator compound (column 6, lines 27-35); wherein the curing agent is an amine or amide containing curing agent or a phenolic curing agent (column 3, line 38 through column 4, line 33); and wherein the contacting occurs by a contacting method (column 7, lines 40-50);

Art Unit: 1712

(2) wherein the accelerated resin composition further comprises one or more solvents (column 7, lines 51-60);

(3) wherein the accelerated resin composition is in powder, hot melt, solution, or dispersion form (column 7, lines 40-60);

(4) wherein the contacting method is selected from the group consisting of powder coating, spray coating, die coating, roll coating, resin infusion and contacting the substrate with a bath comprising the accelerated resin composition (column 7, lines 40-60);

(5) wherein the substrate comprises a material selected from the group consisting of glass, fiberglass, quartz, paper, thermoplastic resin, an unwoven aramid reinforcement, carbon, graphite, ceramic, metal and combinations thereof (column 7, lines 40-50; column 9, line 35 through column 10, line 68);

(6) wherein the article is a prepreg, wherein the substrate comprises a material selected from the group consisting of glass, fiberglass, quartz, paper, thermoplastic resin, an unwoven aramid reinforcement, carbon, graphite, ceramic, metal and combinations thereof, and wherein the contacting occurs in a bath comprising the accelerated resin composition and optionally one or more solvents (column 7, lines 40-60; column 9, line 35 through column 10, line 68); (7) wherein the substrate is glass or fiberglass in the form of a woven cloth or a mat (column 7, lines 40-60; column 9, line 35 through column 10, line 68);

(14) wherein the alkali metal containing cure accelerator compound is utilized in an amount greater than 0.00001 molar equivalents per 100 grams of epoxy resin solids (column 6, lines 36-39);

Art Unit: 1712

(15) wherein the epoxy resin is derived from the reaction of an epihalohydrin and a phenol or a phenol type compound (column 3, lines 28-37); (16) wherein the phenol or a phenol type compound is selected from the group consisting of bisphenols, halogenated bisphenols, hydrogenated bisphenols, novolac resins, polyalkylene glycols and combinations thereof (column 3, lines 28-37);

(17) a resin coated article prepared by the process of claim 1 (column 7, lines 40-50); and

(18) a prepreg prepared by the process of claim 1 (column 7, lines 40-50).

6. Claims 1-5, 8-14, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Greene (US Pat. No. 6,344,520).

Regarding claims 1-5, 8-14, and 17, Greene discloses: (1) a process for preparing a resin coated article, the process comprising contacting a substrate with an accelerated resin composition (Abstract; column 1, lines 6-12) comprising an epoxy resin (column 3, line 30 through column 6, line 53), a curing agent (column 6, line 65 through column 7, line 53), and an alkali metal containing cure accelerator compound (column 7, line 54 through column 8, line 2); wherein the curing agent is an amine or amide containing curing agent or a phenolic curing agent (column 6, line 65 through column 7, line 53), and wherein the contacting occurs by a contacting method (column 8, lines 50-64; column 9, lines 9-14);

(2) wherein the accelerated resin composition further comprises one or more solvents (column 8, lines 50-64);

(3) wherein the accelerated resin composition is in powder, hot melt, solution, or dispersion form (column 8, lines 50-64);

Art Unit: 1712

(4) wherein the contacting method is selected from the group consisting of powder coating, spray coating, die coating, roll coating, resin infusion and contacting the substrate with a bath comprising the accelerated resin composition (column 8, lines 50-64; column 9, lines 9-14);

(5) wherein the substrate comprises a material selected from the group consisting of glass, fiberglass, quartz, paper, thermoplastic resin, an unwoven aramid reinforcement, carbon, graphite, ceramic, metal and combinations thereof (column 9, lines 9-14; Examples);

(8) wherein the alkali metal containing cure accelerator compound is selected from the group consisting of an alkali metal containing hydroxide, alkoxide, carboxylate, halide salt, borate, bicarbonate, carbonate, chlorate, nitrate, phosphate, sulfate, sulfide, sulfite, polysulfide, thiocyanate, silicate, aluminate, phosphonate, sulfonate, cyanate, thiolate, thiophenoxide, thiocarboxylate, thiophosphate, imide salt, an alkali metal ion complexed with coordinating compounds, and combinations thereof (column 7, lines 59-60);

(9) wherein the alkali metal containing cure accelerator compound is selected from the group consisting of an alkali metal containing hydroxide, alkoxide, phenoxide, carboxylate, halide salt, carbonate and combinations thereof (column 7, lines 59-60);

(10) wherein the alkali metal containing compound is represented by the formula MOR or $(MO)_n-R$ wherein M is a metal selected from Group 1 of the periodic table of elements, O is oxygen, and R is hydrogen or a substituted or unsubstituted hydrocarbyl group (column 7, lines 59-60); (11) wherein M is lithium, sodium or potassium, and R is hydrogen or a C_1 to C_{40} hydrocarbyl group (column 7, lines 59-60); (12) wherein OR represents a hydroxy, a methoxy, an ethoxy, an n-propoxy, an isopropoxy, an n-butoxy, an iso-butoxy, a sec-butoxy, a tert-butoxy, or a phenoxy group (column 7, lines 59-60); (13) wherein the alkali metal containing compound

Art Unit: 1712

is selected from the group consisting of lithium hydroxide, sodium hydroxide, potassium hydroxide, sodium methoxide, potassium methoxide, lithium methoxide and combinations thereof (column 7, lines 59-60);

(14) wherein the alkali metal containing cure accelerator compound is utilized in an amount greater than 0.00001 molar equivalents per 100 grams of epoxy resin solids (column 7, lines 54-58); and

(17) a resin coated article prepared by the process of claim 1 (column 9, lines 9-14; Examples).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The rejection of claim 2 under 35 U.S.C. 103(a) as being unpatentable over Corley (US Pat. No. 4,503,200) or Allen (US Pat. No. 4,554,341) has been overcome by amendment.

Claim Rejections - 35 USC § 112

9. The rejection of claims 11-13 under 35 U.S.C. 112, second paragraph, has been overcome by amendment.

Art Unit: 1712

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

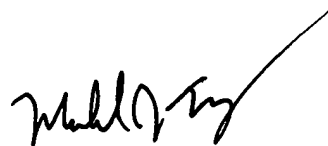
Art Unit: 1712

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely
Primary Examiner
Art Unit 1712

December 22, 2005

**MICHAEL FEELY
PRIMARY EXAMINER**